LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously presented) A composition comprising:
   a) from about 1 to about 98 wt% a thermoplastic elastomer, which is a block copolymer having at least one soft block and at least one hard block;
   b) from about 1 to about 70 wt% a phase change solvent having the general formula:
      (I) $R' - P_y - (Q - P_x)_n - Q - P_y - R$;
      (II) $R' - P_y - (Q - P_x)_n - R$;
      (III) $R' - (Q - P_x)_n - R$;
      (IV) $R' - (Q - P_x)_{n-1} - Q - P_y - R$;
      (V) $R' - (Q - P_x)_n - Q - R$; or
      a mixture thereof;
   wherein Q is a substituted or unsubstituted difunctional aromatic moiety; P is CH_2; R and R' are the same or different and are independently selected from H, CH_3, COOH, $CONHR_1$, $CONR_1R_2$, NHR_3, NR_3R_4, hydroxy, or C1-C30 alkoxy; wherein R_1, R_2, R_3 and R_4 are the same or different and are independently selected from H or linear or branched alkyl from C1-C30; x is an integer from 1 to 30; y is an integer from 1 to 30; and n is an integer from 3 to 7; and
   c) from about 1 to about 70 wt% of a processing oil producing a glass transition temperature of greater than about 85°C for a polystyrene homopolymer;
   wherein the phase change solvent has a phase change in a temperature range from about 40°C to about 250°C.

2. (Original) The composition of Claim 1 wherein the processing oil producing a glass transition temperature of greater than about 87°C for a polystyrene homopolymer.

3. (Original) The composition of Claim 1 wherein the processing oil producing a glass transition temperature of greater than about 90°C for a polystyrene homopolymer.

4. (Original) The composition of Claim 1 wherein the processing oil is selected from the group consisting of poly (alpha olefins),olefinic oligomers, mineral oils, paraffinic oils, isoparaffinic oils, naphthenic oils, petrolatum, waxes, or mixtures thereof.

5. (Original) The composition of Claim 1 wherein the synthetic processing oil is a poly (alpha olefin).

6. (Original) The composition of claim 5 wherein the poly(alpha olefin) is selected from the group consisting of polydodecenes, polydecenes, polyoctenes, polybutylenes, polybutenes, and mixtures thereof.

7. (Original) The composition of claim 5 wherein the poly(alpha olefin) is selected from the group consisting of poly(1-decene), poly(1-dodecene), poly(1-octene), and mixtures thereof.

8. (Original) The composition of Claim 1 wherein the processing oil is a mixture of a synthetic oil and a natural oil.

9. (Original) The composition of Claim 8 wherein the synthetic oil comprises at least about 40% of the processing oil mixture.

10. (Original) The composition of Claim 1 wherein the processing oil has a molecular weight in the range of from about 500 to about 3000 g/mol.

11. (Original) The composition of Claim 1 additionally comprising from about 0.1 to about 50 wt% a nucleating agent.

12. (Original) The composition of Claim 1 additionally comprising from about 1 to about 50 wt% a thermoplastic polymer.

13. (Original) The composition of Claim 1 wherein the composition has a shear viscosity of about 0.1 to about 3000 Pa·s at 190°C and 1 sec^{-1}.

14. (Previously presented) A composition comprising:

a) from about 1 to about 99 wt% a thermoplastic elastomer, which is a block copolymer having at least one soft block and at least one hard block;

b) from about 1 to about 70 wt% a phase change solvent having the general formula:

(I) $R' - P_y - (Q - P_x)_n - Q - P_y - R$;

(II) $R' - P_y - (Q - P_x)_n - R$;

(III) $R' - (Q - P_x)_n - R$;

(VI) $R' - (Q - P_x)_{n-1} - Q - P_y - R$;

(VII) $R' - (Q - P_x)_n - Q - R$; or

a mixture thereof;

wherein Q is a substituted or unsubstituted difunctional aromatic moiety; P is CH_2; R and R' are the same or different and are independently selected from H, CH_3, COOH, $CONHR_1$, $CONR_1R_2$, NHR_3, NR_3R_4, hydroxy, or C1-C30 alkoxy; wherein R_1, R_2, R_3 and R_4 are the same or different and are independently selected from H or linear or branched alkyl from C1-C30; x is an integer from 1 to 30; y is an integer from 1 to 30; and n is an integer from 3 to 7; and

c) from about 1 to about 70 wt% of a processing oil composition comprising a synthetic oil and a natural oil and producing a glass transition temperature of greater than about 85°C for a polystyrene homopolymer;

wherein the phase change solvent has a phase change in a temperature range from about 40°C to about 250°C.

15. (Original) A method of lowering the viscosity and improving the processability of a thermoplastic elastomer, the method comprising the step of:

blending from about 1 to about 99 wt% of the thermoplastic elastomer, which is a block copolymer having at least soft block and at least one hard block, from about 1 to about 70 wt% of a phase change solvent having the general formula (I) – (V) of claim 1, or a mixture thereof, and from about 1 to about 70 wt% of a processing oil producing a glass transition temperature of greater than about 85°C for a polystyrene homopolymer to form an elastomeric composition;

wherein the shear viscosity of the elastomeric composition is lower than the shear viscosity of the thermoplastic elastomer when measured at 190°C and 1 sec^{-1}.

16. (Original) The method of claim 15 wherein the elastomeric composition has a shear viscosity of about 0.1 to about 3000 Pa·s at 190°C and 1 sec^{-1}.

17. (Original) The method of claim 15 further comprising blending one or more additional ingredient with the thermoplastic elastomer, the phase change solvent, and processing oil, wherein the additional ingredient is selected from the group consisting of :

from about 0.1 to about 50 wt% of a nucleating agent;

from about 1 to about 50 wt% of a thermoplastic polymer; and

mixtures thereof.

18. (Original) The method of Claim 15 wherein the processing oil has a molecular weight in the range of from about 500 to about 3000 g/mol

19. (Original) The method of Claim 15 wherein the processing oil comprises 50% of a mineral oil and 50% of a synthetic oil.

20. (Original) The method of Claim 19 wherein the synthetic oil is a poly (alpha olefin).